CYTOKINES IN URINE INDICATES URETHRAL ORIGIN OF URGENCY IN THE "OVERACTIVE BLADDER SYNDROME"

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The absence of pathology in the OverActive Bladder syndrome (OAB) has puzzled doctors for years. Findings of interleukins in urine after transvaginal urethra massage in OAB support theories on an inflammation in the urethral wall as a possible cause of urgency.
Material and Methods: In 100 consecutive patients with OAB, urine diaries were collected for 2 x 24 h before and after treatment. Treatment was given with a transvaginal urethra massage and a local glucocorticoid ointment at four occasions. In 10 patients massage without ointment was performed before treatment. The same procedure was performed in 10 healthy controls. Interleukin 6(IL-6) and IL-8 were analyzed in two consecutive portions of urine.
Results: Treatment decreased voiding frequency in 83% by a mean of 2 sessions /24h, resulting in almost normal frequencies, and was statistically highly significant
30% of patients reporting initial leak stopped leaking.
IL-6 was normal in all but one patient and one control.
IL-8 was increased in 8/10 patients in the first urine portion but only in 3/10 controls. The levels were much lower in controls than in patients. In the second urine sample the concentrations were normal in all controls.
Conclusion: It is highly possible that a low grade inflammation in the urethral wall is the origin of urgency in OAB. Interleukin- 8 released in the urethral wall may function as a nociceptor stimulator, starting the voiding reflex. The inflammation thus seems intimately connected to the voiding reflex. Treatment of urgency should take such a possible inflammation into consideration.